| Ref<br># | Hits   | Search Query  | DBs   | Default<br>Operator | Plurals | Time Stamp       |
|----------|--------|---|-------|---------------------|---------|------------------|
| S1       | 614    | 156/345.ccls or 261/067.ccls. or 118/723ve,723r.ccls.   | USPAT | OR                  | ON      | 2001/05/29 10:58 |
| S2       | 614    | 156/345.ccls or 261/067.ccls. or 118/723ve.ccls. or 118/723r.ccls.  | USPAT | OR                  | ON      | 2001/05/29 10:58 |
| S3       | 57     | (156/345.ccls or 261/067.ccls. or 118/723ve.ccls. or 118/723r.ccls.) and "applied materials".as.  | USPAT | OR                  | ON      | 2001/05/29 11:31 |
| S4       | 485    | (156/345.ccls or 261/067.ccls. or 118/723ve.ccls. or 118/723r.ccls.) and plasma   | USPAT | OR                  | ON      | 2001/05/29 11:03 |
| S5       | 1      | "5646814".pn. and "54"  | USPAT | OR                  | ON      | 2001/05/29 11:31 |
| S6       | 103410 | polish\$3 or abrad\$3 or CMP or "chemical mechanical polishing" or "chemical mechanical planarization"  | USPAT | OR                  | ON      | 2001/06/12 13:14 |
| S7       | 25434  | (polish\$3 or abrad\$3 or CMP or  | USPAT | OR                  | ON      | 2001/06/12 11:21 |
|          |        | "chemical mechanical polishing" or<br>"chemical mechanical planarization"<br>) and (wafer semiconductor ic<br>"integrate circuit")  |       |                     |         |                  |
| S8       | 1371   | ((polish\$3 or abrad\$3 or CMP or "chemical mechanical polishing" or "chemical mechanical planarization" ) and (wafer semiconductor ic "integrate circuit")) and (156/345 or "441"/\$ or "216"/\$).ccls.                    | USPAT | OR                  | ON      | 2001/06/12 11:22 |
| S9       | 0      | (((polish\$3 or abrad\$3 or CMP or "chemical mechanical polishing" or "chemical mechanical planarization" ) and (wafer semiconductor ic "integrate circuit")) and (156/345 or "441"/\$ or "216"/\$).ccls.) and "dress ring" | USPAT | OR                  | ON      | 2001/06/12 11:49 |
| S10      | 23421  | kobayashi-\$.in. or tanaka-\$.in.   | USPAT | OR                  | ON      | 2001/06/12 11:49 |
| S11      | 0      | (kobayashi-\$.in. or tanaka-\$.in.)<br>and "mitsubishi materiasl<br>corporation".as.  | USPAT | OR                  | ON      | 2001/06/12 11:50 |
| S12      | 1015   | (kobayashi-\$.in. or tanaka-\$.in.)<br>and (polish\$3 or abrad\$3 or CMP or<br>"chemical mechanical polishing" or<br>"chemical mechanical planarization"<br>)   | USPAT | OR                  | ON      | 2001/06/12 11:51 |
| S13      | 2334   | (polish\$3 or abrad\$3 or CMP or "chemical mechanical polishing" or "chemical mechanical planarization" ) and ring near10 (carrier head platen pad)   | USPAT | OR                  | ON      | 2001/06/12 13:15 |

| S14 | 78            | (((polish\$3 or abrad\$3 or CMP or   | USPAT           | OR | ON      | 2001/06/12 13:15   |
|-----|---------------|--|-----------------|----|---------|--|
| 514 | 78            | "chemical mechanical polishing" or "chemical mechanical planarization" ) and (wafer semiconductor ic "integrate circuit")) and (156/345 or "441"/\$ or "216"/\$).ccls.) AND ((polish\$3 or abrad\$3 or CMP or "chemical mechanical polishing" or | USPAT           | UK | ON      | 2001/06/12 13:15   |
| -   |               | "chemical mechanical planarization" ) and ring near10 (carrier head platen pad))   |                 |    |         |  |
| S15 | 163           | "118"/\$.ccls. and (que\$3 hold\$3 wait\$3) and (paddle)   | USPAT           | OR | ON      | 2001/11/14 12:02   |
| S16 | 811           | (semiconductor wafer) and (que\$3 hold\$3 wait\$3) and (paddle)  | USPAT           | OR | ON      | 2001/11/14 12:02   |
| S17 | 759           | ((semiconductor wafer) and (que\$3 hold\$3 wait\$3) and (paddle)) not ("118"/\$.ccls. and (que\$3 hold\$3 wait\$3) and (paddle))   | USPAT           | OR | ON      | 2001/11/14 12:03   |
| S18 | 6             | ("4477311"   "4547247"  <br>"4548699"   "4563240"   "4584045"<br>  "4592306").PN.  | USPAT           | OR | ON      | 2001/11/14 12:13   |
| S19 | 38479         | extract\$3 and slurry  | USPAT           | OR | ON      | 2001/11/15 12:10   |
| S20 | 12341         | extract\$3 same slurry   | USPAT           | OR | ON      | 2001/11/15 12:10   |
| S21 | 34            | (extract\$3 same slurry) and<br>(chemical adj mechanical adj<br>(polishing planarization))   | USPAT           | OR | ON      | 2001/11/15 12:20   |
| S22 | 56            | ((gas vapor) near10 slurry) and<br>(chemical adj mechanical adj<br>(polishing planarization))  | USPAT           | OR | ON      | 2001/11/15 12:40   |
| S23 | . ,* <b>0</b> | (microporous adj fiber) and<br>(chemical adj mechanical adj<br>(polishing planarization))  | USPAT           | OR | ON      | 2001/11/15 12:41   |
| S24 | 365           | (fiber) and (chemical adj<br>mechanical adj (polishing<br>planarization))  | USPAT           | OR | ON      | 2001/11/15 12:42   |
| S25 | 26            | (gas near10(fiber)) and (chemical  | USPAT           | OR | ON      | 2001/11/15 12:53   |
|     |               | adj mechanical adj (polishing planarization))  |                 |    | ** ** ; | tering to the state of the stat |
| S26 | 56            | extractor and contactor and fibers   | USPAT           | OR | ON      | 2001/11/15 13:03   |
| S27 | 20            | (extractor and contactor and fibers) and hydrophobic   | USPAT           | OR | ON      | 2001/11/15 13:35   |
| S28 | 1             | "3277947"  | JPO;<br>DERWENT | OR | ON      | 2001/11/15 13:36   |
| S29 | 2             | "03277947"   | JPO;<br>DERWENT | OR | ON      | 2001/11/15 13:36   |
| S30 | 1             | "4967777".pn.  | USPAT           | OR | ON      | 2001/11/16 16:49   |
| S31 | 16            | "4967777"  | USPAT           | OR | ON      | 2001/11/16 17:03   |

|      |       |  | ,                    | <del>,</del> |     | <u> </u>         |
|------|-------|--|----------------------|--------------|-----|------------------|
| S32  | 13295 | (wet adj (etch\$3))  | USPAT                | OR           | ON  | 2001/11/16 17:04 |
| S33  | 1632  | ((wet adj (etch\$3)) ) and (dip\$4)  | USPAT                | OR           | ON  | 2001/11/16 17:04 |
| S34  | 1465  | ((wet adj (etch\$3)) ) and immers\$3   | USPAT                | OR           | ON  | 2001/11/16 17:05 |
| S35  | 2794  | (((wet adj (etch\$3)) ) and (dip\$4))<br>or (((wet adj (etch\$3)) ) and<br>immers\$3)  | USPAT                | OR           | ON  | 2001/11/16 17:05 |
| S36  | 1327  | ((((wet adj (etch\$3)) ) and (dip\$4))<br>or (((wet adj (etch\$3)) ) and<br>immers\$3)) and (lift vertical)  | USPAT                | OR           | ON  | 2001/11/16 17:06 |
| S37  | 1418  | (((((wet adj (etch\$3)) ) and (dip\$4)) or (((wet adj (etch\$3)) ) and immers\$3)) and (lift vertical)) or ((((wet adj (etch\$3)) ) and (dip\$4)) or (((wet adj (etch\$3)) ) and immers\$3)) and (156/345.ccls. or "134"/\$.ccls.))  | USPAT                | OR           | ON  | 2001/11/16 17:06 |
| \$38 | 162   | ((((((wet adj (etch\$3)) ) and (dip\$4)) or (((wet adj (etch\$3)) ) and immers\$3)) and (lift vertical)) or ((((wet adj (etch\$3)) ) and (dip\$4)) or (((wet adj (etch\$3)) ) and immers\$3)) and (156/345.ccls. or "134"/\$.ccls.))) and (156/345. ccls. or "134"/\$.ccls.)   | USPAT                | OR           | ON  | 2004/08/20 22:13 |
| S39  | 22    | (("5868898") or ("5839456") or ("5827396") or ("5730162") or ("5698038") or ("5415698") or ("5188701") or ("6228211") or ("6281136") or ("6090720") or ("6071374") or ("6054062") or ("5464480") or ("5976311") or ("5776296") or ("5672212") or ("5174855") or ("5904572") or ("5804516") or ("5698040") or ("5817185") or ("6276379")).PN. | USPAT;<br>USOCR      | OR           | OFF | 2002/06/25 12:38 |
| S40  | 8     | "5904608"  | USPAT                | OR           | ON  | 2001/11/30 09:53 |
| S41  | 1     | "5976311".pn.  | USPAT                | OR           | ON  | 2001/11/30 10:41 |
| S42  | 607   | ((wet or dip\$3) same (bubbl\$3 sparger "stream plate")) and (156/345\$.ccls. or etch\$3)  | USPAT                | OR           | OFF | 2004/08/20 22:32 |
| S43  | 96    | ((wet or dip\$3) same (bubbl\$3<br>sparger "stream plate")) and<br>(etch\$3)   | EPO; JPO;<br>DERWENT | OR           | OFF | 2002/06/25 13:38 |
| S44  | 124   | ((((wet adj (etch\$3)) ) and (dip\$4)) or (((wet adj (etch\$3)) ) and immers\$3)) and (156/345.ccls. or "134"/\$.ccls.)  | USPAT                | OR           | ON  | 2002/09/25 09:31 |
| S45  | 267   | ((wet adj (etch\$3)) and (dip\$4)) or ((wet adj (etch\$3)) and immers\$3)  | EPO; JPO;<br>DERWENT | OR           | ON  | 2004/08/20 22:31 |

|            | <u> </u> |   |       |    |            |                  |
|------------|----------|---|-------|----|------------|------------------|
| S46        | 171      | (((((((wet adj (etch\$3)) ) and (dip\$4)) or (((wet adj (etch\$3)) ) and immers\$3)) and (lift vertical)) or (((((wet adj (etch\$3)) ) and (dip\$4)) or (((wet adj (etch\$3)) ) and immers\$3)) and (156/345.ccls. or "134"/\$.ccls.))) and (156/345. ccls. or "134"/\$.ccls.)  | USPAT | OR | ON         | 2004/08/20 22:13 |
| S47        | 1066     | ((wet dip\$4) same (process\$3 etch\$3)) and( (guide support) with (notch stopper groove))  | USPAT | OR | OFF        | 2004/08/20 22:33 |
| S48        | 24       | ((wet dip\$4) with (process\$3<br>etch\$3)) same( (guide support)<br>with (notch stopper groove))   | USPAT | OR | OFF        | 2004/08/20 22:34 |
| S49        | 15       | (((wet dip\$4) with (process\$3 etch\$3)) same( (guide support) with (notch stopper groove))) same (wafer substrate semiconductor)  | USPAT | OR | OFF        | 2004/08/20 22:35 |
| S50        | 211284   | wet adj etch\$3) (dip\$4) (isotropic\$4   | USPAT | OR | OFF        | 2004/08/20 22:36 |
| S51        | 48556    | (wet adj etch\$3) (dip\$4)  | USPAT | OR | OFF        | 2004/08/20 22:36 |
|            |          | (isotropic\$4) and (wafer semiconductor)  |       |    | mana _ kal |                  |
| S52        | 21587    | ((wet adj etch\$3) (dip\$4)<br>(isotropic\$4) and (wafer<br>semiconductor)) and (156/345.\$.<br>"216"/\$ "438"/\$ "134"/\$)   | USPAT | OR | OFF        | 2004/08/20 22:37 |
| S53        | 986      | (((wet adj etch\$3) (dip\$4)<br>(isotropic\$4) and (wafer<br>semiconductor)) and (156/345.\$.<br>"216"/\$ "438"/\$ "134"/\$)) and<br>(guide)  | USPAT | OR | OFF.       | 2004/08/20 22:37 |
| S54        | 218      | ((((wet adj etch\$3) (dip\$4)<br>(isotropic\$4) and (wafer<br>semiconductor)) and (156/345.\$.<br>"216"/\$ "438"/\$ "134"/\$)) and<br>(guide)) and (notch stopper slot)   | USPAT | OR | ON         | 2004/08/20 22:38 |
| <b>S55</b> | 28       | ("3899372"   "3934733"   "4171740"   "4219835"   "4256229"   "4256514"   "D260237"   "4471716"   "4573851"   "4574950"   "4653636"   "4817795"   "4949848"   "5025926"   "5101976"   "5111936"   "5370142"   "5464480"   "5605246"   "5632374"   "5704494"   "5706946"   "5725101"   "5782361"   "5782362"   "5862823"   "5921397"   "5960960").PN. | USPAT | OR | OFF        | 2004/08/20 22:53 |
| S56        | 1        | "4256229".pn.   | USPAT | OR | ON         | 2004/08/23 10:08 |
| S57        | 137      | robot and (156/345.11 156/345.51 134/113 134/135)   | USPAT | OR | ON         | 2004/08/23 10:45 |
| -          | ·····    | <u> </u>  |       |    |            | <u> </u>         |

| S58 | 439   | arm and (156/345.11 156/345.51 134/113 134/135)   | USPAT           | OR | ON | 2004/08/23 10:46 |
|-----|-------|---|-----------------|----|----|------------------|
| S59 | 351   | (arm and (156/345.11 156/345.51 134/113 134/135)) not (robot and (156/345.11 156/345.51 134/113 134/135)) | USPAT           | OR | ON | 2004/08/23 12:08 |
| S60 | 2     | "07164328"  | JPO;<br>DERWENT | OR | ON | 2004/08/23 12:10 |
| S61 | 0     | "200450315"   | JPO;<br>DERWENT | OR | ON | 2004/08/23 12:10 |
| S63 | 37554 | (arm transfer robot) and (h01l021\$. ipc. h05h001\$.ipc. b08b07\$.ipc.)                                   | JPO;<br>DERWENT | OR | ON | 2005/01/24 13:47 |
| S64 | 5332  | S63 and (etch\$3 remov\$3)  | JPO;<br>DERWENT | OR | ON | 2005/01/24 13:48 |
| S65 | 452   | S64 and (boat holder guide\$1)  | JPO;<br>DERWENT | OR | ON | 2005/01/24 13:48 |